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10/031,736	05/07/2002	Kyu Jin Park	70591. (new)	6170

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EXAMINER

HARPER, V PAUL

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/031,736	<b>Applicant(s)</b> PARK, KYU JIN	
	<b>Examiner</b> V. Paul Harper	<b>Art Unit</b> 2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☒ Some \*    c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
- 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
- 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>05/07/2002</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The Examiner has considered the references listed in the Information Disclosure Statement dated 07/05/2002. A copy of the Information Disclosure Statement is attached to this office action.

### ***Priority***

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in the Republic of Korea on 07/31/1999. It is noted, however, that applicant has not filed a certified copy of the 1999/31624 07/31/1999 application as required by 35 U.S.C. 119(b).

### ***Specification***

3. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

The following are some examples of where the specification is either unintelligible, or ambiguous:

p. 10, lines 1-3. Does "a distinguishing" mean "a separation is carried out"?

p. 11, line 23: "loading the cation data".

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p. 11, lines 26-27: "only the voice of the speaker is loaded in the digital data file to record it".

p. 12, lines 13-22, the term "scenario(s)" is used. Would not the term "scene(s)" be more appropriate?

p. 13, line 12 and p. 14, line 5, the term "mike" is used. Would it not be more conventional to feed "back into his or her own ear through the speaker (or headphones)"?

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 through 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

The following are some examples of the problems that need to be addressed.

Regarding claims 1, 3, and 6 the preamble indicates a "method for learning," but the subsequent limitations seem to be related formatting issues, e.g. "forming a first learning pattern storing mode for storing..." and not a "method for learning."

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Furthermore, it is unclear what "converting into a digital file" entails. Are the individual components still accessible? In the "whereby" clause, the term "reproduced" and/or "reproduction" is unclear? Does it mean a copy is being made, or that data is being accessed and/or played back?

Regarding claims 2, and 5 the preamble indicates "a storing method for storing components of songs" but the subsequent limitations seem to be related to only formatting issues, e.g. "forming a first learning pattern storing mode for storing ...".

Claim 6, line 11, the term "scenario" is unclear. Could this mean "scene" as in "record a scene of the move"?

Also the first limitation states "forming a pattern storing mode ... of all voices of all talkers" and the second limitation states "forming a second pattern storing mode ... after deleting voices of certain talkers." Finally, in the whereby clause the user selects a "learning reproduction mode and selects the talkers." Which talkers: "[A]ll" as in the first limitation or the ones deleted (or not deleted) as in the second limitation?

In lines 12 and 13, "a learning reproduction mode" has to be "selected" but no choices have been previously introduced.

Regarding claims 10, 16 and 20, the preamble indicates a "method for learning" or a "learning apparatus" but the subsequent limitations seem only related to the outputting of audio signals on various channels.

Regarding **claim 11**, the phrase "**the** selected channel output signals" has no antecedent basis. Furthermore, the phrasing is confusing.

5. Given the above rejections, the following art rejections are made based on the best interpretation of the claims in view of the existing art.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Wakamoto (U.S. 6,283,760), hereinafter referred to as Wakamoto.

Regarding **claim 1**, Wakamoto discloses a learning and storage method.  
Wakamoto's method includes the following steps:

- forming a first learning pattern storing mode for storing a song caption, a voice of an original singer, and a melody accompaniment by converting their signals into a digital file (col. 2, lines 40-45; col. 3, lines 21-66, in a plurality of channels); and

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- forming a second learning pattern storing mode for storing a song caption and a melody accompaniment by converting their signals into a digital file (col. 3, lines 21-66),
- whereby a digital file is formed for an arbitrary song, and the digital file is reproduced based on the first or second learning pattern storing mode so as to facilitate learning an arbitrary song (col. 9, lines 41-65; e.g., playback using various channels).

Regarding **claim 2**, Wakamoto discloses a learning and storage method.

Wakamoto's method includes the following steps:

- forming a first learning pattern storing mode for storing a song caption, a voice of an original singer, and a melody accompaniment by converting their signals into a digital file (col. 3, lines 21-66; col. 2, lines 40-45, plurality of channels);
- forming a second learning pattern storing mode for storing a song caption and a melody accompaniment by converting their signals into a digital file in respectively storable forms; and forming a third learning pattern storing mode for storing a melody accompaniment by converting their signals into a digital file (col. 3, lines 21-66, plurality of channels),
- whereby one or two or more of the above storing modes are combined to store the components of the song (col. 9, lines 41-65).

Regarding **claim 3**, Wakamoto discloses a learning and storage method.

Wakamoto's method includes the following steps:

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- forming a first learning pattern storing mode for storing a voice and a caption of a foreign language speech or a news by distinguishing the voice of a speaker and the caption of speech details in letters or news details in letters, and by converting signals of the audio and caption to a digital file (abstract, col. 3, lines 21-66, plurality of caption channels); and
- forming a second learning pattern storing mode for storing only a voice of a foreign language speech or a news by distinguishing the voice of a speaker and the caption of speech details in letters or news details in letters, and by converting signals of only the voice of the speaker to a digital file (col. 3, lines 21-66; col. 9, lines 41-65),
- whereby a digital file is formed for an arbitrary speech or news, and the digital file is reproduced in accordance with a selection of a reproduction by a user so as to make it possible to arbitrarily learn a language through the speech or news (col. 2, lines 39-50).

Regarding **claim 4**, Wakamoto teaches everything claimed, as applied above (see claim 3). In addition, Wakamoto teaches “forming a third learning pattern storing trade for storing talkers' voices, the caption of the speech or news, and a translation of the speech or news in a form of a digital file” (Table 2, English, Japanese).

Regarding **claim 5**, Wakamoto discloses a learning and storage method. Wakamoto's method includes the following steps:



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- forming a first learning pattern storing mode for storing a voice and a caption of a foreign language speech or a news by distinguishing the voice of a speaker and a caption of speech details in letters or news details in letters, and by converting signals of the audio and caption to a digital file (col. 3, lines 21-66, plurality of channels; Table 2, col. 15); and
- forming a second learning pattern storing mode for storing only the voice of a foreign language speech or a news by distinguishing the voice of a speaker and a caption of speech details in letters or news details in letters, and by converting signals of only the voice of the speaker to a digital file (col. 3, lines 21-66, plurality of channels; Table 2, col. 15),
- whereby an arbitrary speech or news is stored in a form of a digital file (col. 9, lines 41-65).

Regarding **claim 6**, Wakamoto discloses a learning and entertainment method and storage media therefore. Wakamoto's method includes the following steps:

- forming a first learning pattern storing mode for recording a full sound - full caption by preparing a digital data file of all voices and all talk captions of all talkers of a foreign movie or drama (col. 14, line 65 through col. 15, line 55; Table 2, e.g. English [all characters]); and
- forming a second learning pattern storing mode for storing a voice of a data file by recording a scenario of the movie or drama after deleting voices of certain talkers so

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as to make a user talk in place of the deleted voices (col. 16, lines 16-37; role-playing games; characters can be selected, scenes can be selected),

- whereby a digital data is formed, and if the user selects a learning reproduction mode and selects the talkers, the digital data file is selectively reproduced so as to make the user talk in place of the particular talkers (col. 16, lines 17-37; role-playing games).

Regarding **claim 7**, Wakamoto teaches everything claimed, as applied above (see claim 6). In addition, Wakamoto teaches "inputting names of talkers and the caption data, serial codes are assigned for the talkers instead of the names of the talkers, and the names of the talkers are respectively matched to the serial codes, whereby the captions and audio outputs of particular talkers can be selectively deleted when carrying out the learning (col. 3, lines 22-41; a channel can be selected and a channel might display only the words associated with a character; a character can be designated "character A").

Regarding **claim 8**, Wakamoto teaches everything claimed, as applied above (see claim 6). In addition, Wakamoto teaches "the digital file prepared by the first and second learning pattern storing modes can be transmitted through a wire such as a printer port (parallel port), a serial port, USB (universal serial bus), firewire (IEEE 1394), or through a wireless route such as an infrared ray data or a blue tooth" (col. 5, lines 54-58, wireless).

Regarding **claim 9**, Wakamoto teaches everything claimed, as applied above (see claim 7). In addition, Wakamoto teaches that “the digital file storing means of a reproduction apparatus is a non-volatile memory such as flash memory, or a DVD (digital versatile disk).” (col. 5, lines 39-59; “storage medium” includes DVD).

Regarding **claim 10**, Wakamoto discloses a learning and storage method.

Wakamoto's method includes the following steps:

- checking an operation mode of a current reproduction operation upon inputting an operation-on signal by a user for reproducing audio signals (first step) (Fig. 2; Fig. 6; Fig. 12; Table 2);
- outputting audio signals which have been set to respective channels (R and L), if the operation mode is found to be a normal channel outputting (second step) (Table 2);
- reproducing and outputting the audio signals to the right channel if the operation mode is set to the right channel (R) (third step) (Table 2; Fig. 6; Fig. 7); and
- reproducing and outputting the audio signals to the left channel (L) if the operation mode is set to the left channel (fourth step) (Table 2; Fig. 6; Fig. 7).

Regarding **claim 11**, Wakamoto teaches everything claimed, as applied above (see claim 10). In addition, Wakamoto teaches “wherein at the third and/or fourth step, when reproducing the selected channel output signals, the signals of the selected channel are outputted also through non-selected channels so as make the selected channel signals outputted through two channels (R and L)” (see the references

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indicated in the rejection of claim 12; col. 6, lines 50-53; the selected channels are played through both speakers; col. 9, the L side channel is audible to the operator through the speakers—i.e., both channels; col. 14, lines 53-64).

Regarding **claim 12**, Wakamoto teaches everything claimed, as applied above (see claim 10 or 11). In addition, Wakamoto teaches "the caption data is outputted in synchronization with the output of the audio signals of the selected channel" (Table 2, includes subtitle data along with audio which would inherently be synchronized; col. 17, lines 30-43; time codes for matching).

Regarding **claim 13**, Wakamoto teaches everything claimed, as applied above (see claim 12). In addition, Wakamoto teaches "the caption data synchronized with the audio signals can be turned on or off in accordance with a progress degree of the learning, a difficulty level, or an individual's taste" (col. 6, line 65 through col. 7, line 5; subtitles can be turned off).

Regarding **claim 14**, Wakamoto teaches everything claimed, as applied above (see claim 10). In addition, Wakamoto teaches "the digital file can be transmitted through a wire such as a printer port (parallel port), a serial port, USB (universal serial bus), firewire (IEEE 1394), or through a wireless route such as an infrared ray data or a blue tooth" (col. 5, lines 53-59, wireless communications).

Regarding **claim 15**, Wakamoto teaches everything claimed, as applied above (see claim 10). In addition, Wakamoto teaches "the digital file storing means of a reproduction apparatus is a non-volatile memory such as flash memory, or a DVD (digital versatile disk)" (col. 5, lines 39-57).

Regarding **claim 16**, Wakamoto discloses a learning and storage method. Wakamoto's method includes the use of multiple channels (col. 9, lines 41-65; col. 14, lines 52-64) and the following steps:

- checking an operation mode of a current reproduction operation upon inputting an operation-on signal by a user for reproducing audio signals (first step) (Fig. 12; Table 2; col. 15, lines 44-55, movie mode);
- outputting audio signals which have been set to respective channels (R and L), if the operation mode is found to be a normal channel outputting (second step) (col. 15, lines 44-55; Table 2, channel 1 has stereo output); and
- reproducing and outputting the signals to a particular channel if the operation mode is set to the particular channel (R) (third step) (Table 2; col. 15-16, sounds are output).

Regarding **claim 17**, Wakamoto teaches everything claimed, as applied above (see claim 16). In addition, "at the third step, when reproducing the selected channel output signals, the signals of the selected channel are outputted also through non-selected channels so as make the selected channel signals outputted also through the

rest of the channels" (Fig. 7, col. 9, lines 15-21; only the voice of the L side channel is audible through the speakers).

Regarding **claim 18**, Wakamoto teaches everything claimed, as applied above (see claim 17). In addition, Wakamoto teaches "the caption data is outputted through a display screen of a reproduction apparatus in synchronization with the output of the audio signals of the selected channel" (Fig. 12; col. 15, lines 35-40, subtitles can be selected and would inherently be synchronized with sound).

Regarding **claim 19**, Wakamoto teaches everything claimed, as applied above (see claim 18). In addition, "the caption data synchronized with the audio signals can be turned on or off in accordance with a progress of the learning, a difficulty level, or an individual's taste" (col. 15; lines 35-40, can select subtitle; col. 6, line 65 through col. 7, line 5; subtitles can be turned off).

Regarding **claim 20**, Wakamoto discloses a learning and storage method.  
Wakamoto's method includes the following steps:

- if an operation-on signal for reproducing audio signals from a keypad is an input, an operation mode during a reproduction which is currently set by a control section is checked (Fig. 5, remote with keypad; col. 6; lines 30-44);

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- if the operation mode is normal, the control section controls a decoder to output the audio signals which have been set to respective channels (R and L) (col. 6, lines 44-55; if both channels are selected ... playback is in stereo);
- if the operation mode is set to the right channel (R), the control section controls the decoder to reproduce and output the audio signals to the right channel (col. 6, lines 44-56; selection of CH2 causes the signal to be heard from the right-hand speaker); and
- if the operation mode is set to the Left channel (L), the control section controls the decoder to reproduce and output the audio signals to the left channel (col. 6, lines 44-56; selection of CH1 causes the signal to be heard from the left-hand speaker).

Regarding **claim 21**, Wakamoto teaches everything claimed, as applied above (see claim 20). In addition, Wakamoto teaches "the caption data is outputted through a display screen of a reproduction apparatus in synchronization with the output of the audio signals of the selected channel" (col. 6, line 65 through col. 7, line 8; where the subtitles will inherently be synchronized with the corresponding audio).

#### ***Citation of Pertinent Art***

7. The following prior art made of record but not relied upon is considered pertinent to the applicant's disclosure:

- Bishop (U.S. 5,810,599) discloses an interactive audio-visual foreign language skills maintenance system and method where the user interacts with the computer for role playing.

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- Song (U.S. 6,267,600) discloses a microphone and receiver for automatic accompaniment where a melody and a song voice can be mixed.
- Tubman et al. (U.S. 5,820,384) disclose a sound recording system that includes a multi-track recording in time sequence.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Paul Harper whose telephone number is (571) 272-7605. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7/14/2005

V. Paul Harper  
Patent Examiner  
Art Unit 2654

